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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,125	10/27/2003	Alan Devoe	DEVOE-09CO	2534

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EXAMINER

THOMAS, ERIC W

ART UNIT PAPER NUMBER

2831

DATE MAILED: 05/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/694,125

Applicant(s)

DEVOE ET AL.

Examiner

Eric W Thomas

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2,3,6,9,12,23-26 and 28-57 is/are pending in the application.
- 4a) Of the above claim(s) 47-57 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12,23-26, 28-45 is/are allowed.
- 6) ☒ Claim(s) 2,3,6,9 and 46 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10/27/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1/04, 1/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION**INTRODUCTION****Introduction:**

The examiner acknowledges, as recommended in M.P.E.P. 707.04, the applicant's submission of the amendment dated 11/10/03 (and 10/27/03). At this point, claims 2-3, 6, 9, 12, 23-24, 26 have been amended; claims 1, 4-5, 7-8, 10-11, 13-22 have been cancelled; and claims 38-57 have been added. Thus, claims 2, 3, 6, 9, 12, 23-26, 38-57 are pending in the instant application.

*****It should be noted:** the amendment to the specification (dated 10/27/03) contains an error: "Please replace the paragraph beginning at page 33..." There are only 21 pages ^{in the} of specification.

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 2-3, 6, 9, 12, 23-26, and 38-46 are drawn to a capacitor, classified in class 361, subclass 303.
 - II. Claims 47-57, drawn to a method of forming a capacitor, classified in class 29, subclass 25.42.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process

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(MPEP § 806.05(f)). In the instant case the capacitor as claimed does not require the step of cutting the laminated sheets a plurality of times in a first direction and then a plurality of times in a second direction perpendicular to the first dielectric to form a plurality of chips.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

4. During a telephone conversation with Kristi Davidson on 4/13/04 a provisional election was made without traverse to prosecute the invention of I, claims 2-3, 6, 9, 12, 23-26, and 38-46. Affirmation of this election must be made by applicant in replying to this Office action. Claims 47-56 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

6. The disclosure is objected to because of the following informalities:

Applicant is required to update the priority information found on page one of the instant application.

Appropriate correction is required.

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7. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

8. Claims 2-3, 6, 9 are objected to because of the following informalities:

Claim 2, line 1 change "the composite portion" to –the at least one composite portion–.

Claim 3, line 1 change "the composite portion" to –the at least one composite portion–.

Claim 6, line 3 change "the composite portion" to –the at least one composite portion–.

Claim 9, lines 3-4, change "the composite portion" to –the at least one composite portion–.

Claim 9, lines 5, change the first and second occurrence of "the composite portion" to –the at least one composite portion–.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

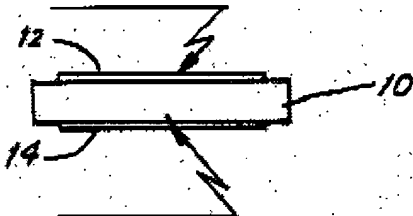
A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

10. Claims 2-3, 9, and 46 are rejected under 35 U.S.C. 102(b) as being anticipated by Carter et al. (US 3,221,228).

*SILVER COATING COMPOSITION
CONTAINING FINELY DIVIDED SILVER AND SnO*



*ALKALINE EARTH TITANATES, PARTICULARLY
REDUCED BARIUM TITANATE AND
1% RARE EARTH OXIDE*

Regarding claim 9, Carter et al. disclose in the fig., a capacitor comprising an essentially monolithic structure of at least one composite portion (14) sintered with a ceramic dielectric portion, wherein the composite portion includes a ceramic (SnO) and a conductive metal (Ag) in an amount sufficient to render the composite portion conductive, and wherein the ceramic dielectric portion is horizontally disposed with the composite portion sintered to a bottom portion thereof, and the capacitor further comprising a metallization on a top portion of the ceramic dielectric portion.

Regarding the limitations, "the composite portion adapted to be mounted onto a pc board" and "the metallization adapted to be wire bonded to a pc board" it has been held that the recitation that an element is "adapted to" perform a function is not a positive limitation but only requires the ability to so perform. It does not constitute a limitation in any patentable sense. *In re. Hutchison*, 69 USPQ 138.

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Regarding claim 2, Cater et al. disclose the at least one composite portion comprises glass sintered with the ceramic dielectric portion (see col. 3 lines 15-45).

Regarding claim 3, Carter et al. disclose the at least one composite portion comprises a matrix of the ceramic, and particles of the conductive metal are dispersed in the matrix, and wherein the conductive metal particles comprise about 40-90 % of the composite portion (as suggested in col. 5 lines 20-35 and col. 3 line 20).

Regarding claim 46, Carter et al. disclose the ceramic dielectric portion is free of internal metal electrodes.

Double Patenting

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 6, and 9 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7, and 7 of U.S. Patent No. 6,661,639. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Regarding claim 9, '639 discloses a capacitor comprising an essentially monolithic structure of at least one composite portion (14) sintered with a ceramic dielectric portion, wherein the composite portion includes a ceramic and a conductive metal in an amount sufficient to render the composite portion conductive, and wherein the ceramic dielectric portion is horizontally disposed with the composite portion sintered to a bottom portion thereof, and the capacitor further comprising a metallization on a top portion of the ceramic dielectric portion

Regarding claim 6, '639 discloses a buried metallization in the dielectric portion and having at least one metal-filled via extending from the buried metallization to the at least one composite portion. '639 discloses the claimed invention except for the metallization is oriented horizontally in the dielectric portion. It is well known in the capacitor art to form a metallization horizontally in a dielectric portion (ceramic). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify '639 by providing a horizontally arranged metallization within the ceramic material, since such a modification would form an internal element having a preset surface area.

13. Claim 2, 3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 7, 7 of U.S. Patent No. 6,661,639 in view of Carter (US 3,221,228).

Regarding claim 2, '639 discloses the claimed invention except for the composite portion comprises glass sintered with the ceramic dielectric portion. Carter teach the

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use of a composite portion comprising a glass. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify '639 with the composite of Carter since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Regarding claim 3, '639 discloses the claimed invention except for the at least one composite portion comprises a matrix of the ceramic, and particles of the conductive metal are dispersed in the matrix, and wherein the conductive metal particles comprise about 40-90 % of the composite portion.

Carter et al. teach the use of at least one composite portion comprises a matrix of the ceramic, and particles of the conductive metal are dispersed in the matrix, and wherein the conductive metal particles comprise about 40-90 % of the composite portion (as suggested in col. 5 lines 20-35 and col. 3 line 20). It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify '639 with the composite of Carter since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

Allowable Subject Matter

14. Claims 12, 23-26, 28-45 are allowed.

15. The following is a statement of reasons for the indication of allowable subject matter: The prior art does not teach or fairly suggest (taken in combination with the other claimed features) each internal vertical face co-sintered to a respective opposed

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vertical coplanar surface of the center ceramic dielectric portion so as to have essentially no boundary therebetween (claims 12, 23-26, 38-39); and each internal horizontal face co-sintered to a respective opposed horizontal coplanar surface of the center ceramic dielectric portion (claims 40-45).

Conclusion

In order to ensure full consideration of any amendments, affidavits, or declaration, or other documents as evidence of patentability, such documents must be submitted in response to this Office action. Submissions after the next Office action, which is intended to be a final action, will be governed by the requirements of 37 CFR 1.116 which will be strictly enforced.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric W Thomas whose telephone number is (571) 272-1985. The examiner can normally be reached on M, T, Sa 9:00AM - 9:30PM; W, Th, F 5:30PM-10:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-1984. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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4/28/04